the textiles are prepared. These investigations were the chemical basis of the invention of the well-known "Mather" Kier and process. In 1885 "Cross and Bevan" was established at 4 New Court, Lincoln's Inn, where the scientific-technical research work has been carried on ever since. The invention of the well-known "Viscose" process in 1892 resulted from the systematic investigations of the antecedent period.

The development of this matter becoming a pressing question of "ways and means," Mr. Bevan decided to enter the field of professional chemistry, and obtained the appointment of County Analyst for Middlesex. In this field he made his particular personal reputation. The long tenure of this important position (1892–1921) is evidence of Mr. Bevan's exceptional qualifications, and in addition to those of chemist his qualities of character, brought to bear on activities associated with his office, were honoured by influential positions in the Institute of Chemistry (vice-president) and Society of Public Analysts (president).

Mr. Bevan's life-work is a many-sided constructive contribution to chemical science, and his career may be an encouragement to young students of this generation who are inclined to despise the day of small beginnings.

THE third EARL OF DUCIE, who died on October 28, aged ninety-four, was much interested in natural science, and was for many years an active geologist. He joined the Geological Society in 1853, and was a member of council from 1856 to 1858. He collected fossils, and between 1864 and 1891 made many valuable gifts of specimens to the British Museum. He also made important observations on the geology of the region round Tortworth, Gloucestershire, his country seat. He was elected a fellow of the Royal Society in 1855.

THE death occurred on Friday, October 28, at the age of forty-two years, of PROF. F. E. ARMSTRONG, professor of mining at the University of Sheffield.

WE regret to announce the death, on Thursday, October 27, at the age of forty-seven years, of PROF. F. A. BAINBRIDGE, professor of physiology in the University of London.

WE much regret to see the announcement of the death on October 29, at the age of fifty-four years, of DR. W. S. BRUCE, the well-known Polar explorer and naturalist.

Notes.

ON Monday last, October 31, twenty-five years had elapsed since Prof. P. Zeeman's first observations of the decomposition of spectral lines by a magnetic field were communicated to the Amsterdam Academy of Sciences in a paper that appeared shortly afterwards in the *Philosophical Magazine* under the title "On the Influence of Magnetism on the Nature of the Light emitted by a Substance." By this important advance in magneto-optics, the first made since the days of Faraday and Kerr, a new and vast field of research of uncommon interest was opened. In commemoration of this development a reprint of Prof. Zeeman's original papers has now been published by the physicists of the Netherlands, conjointly with many scientific men of other countries. Prof. Zeeman has also been honoured by a special issue of the Dutch journal *Physica*, containing contributions by C. Cotton, G. E. Hale, Ph. Kohnstamm, T. van Lohnizen, H. A. Lorentz, A. van Maanen, E. E. Mogendorff, H. Kamerlingh Onnes, F. Paschen, and C. Runge. Some of these articles are devoted to an appreciation of Zeeman and his work or to the history of his discovery. In others the present state of magneto-optical theory and the latest results in the experimental investigation of the Zeeman effect are discussed. The bearing of the phenomenon on solar physics and the conclusions that have already been drawn concerning the magnetic field of sun-spots and the sun's general magnetic field are explained by Prof. Hale and Mr. van Maanen. Finally, Prof. Paschen describes a new phenomenon lately discovered by him, and consisting in the appearance, under the influence of a magnetic field, of certain spectral lines that cannot otherwise be produced. We are glad to avail ourselves of this opportunity of expressing our high appreciation of Prof. Zeeman's brilliant work, by which he has contributed most effectively to the development of modern physics.

"Is it advisable that every clinical thermometer offered for sale in Great Britain should be tested at the National Physical Laboratory?" This is the question asked and answered affirmatively in a circular issued by the British Lampblown Scientific Glassware Manufacturers Association and circulated amongst members of Parliament, the medical profession, etc. It is pointed out that from the consumer's point of view it is as important to be assured that the clinical thermometer he buys is accurate within two-tenths of a degree Fahrenheit as it is to have a guarantee, such as the law provides, that when he purchases butter it is pure butter that he gets. From the maker's point of view it is to the good of the trade in this country that there should be such a standard of accuracy of clinical thermometers that everyone will know the British article to be above suspicion. When the Government made testing compulsory, at least 25 per cent. of the first batches tested were rejected as inaccurate; but there was steady improvement until, at the time of the abolition of the compulsory test, the rejections were of the order of only 1½ per cent. The quantities under test, which in November, 1919, when testing was compulsory, were 135,000 per month, dropped to 55,000 per month in June, 1921, when the compulsory test was abolished. In view of these results the British Lampblown Scientific Glassware Manufacturers Association invite support of

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